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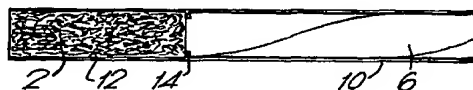
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(54) **Cigarette manufacture**

(57) Cigarettes, particularly papirosi-style or Russian cigarettes, are formed by joining together tobacco sections and mouthpiece portions by means of an overwrapper which extends over a substantial part of the tobacco section. Preferably the tobacco section has a porous wrapper. The mouthpiece portions preferably comprise tubes, which may include helically wound layers, having inwardly-directed flaps acting as a fireball trap.

Fig.3.



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Fig.1.

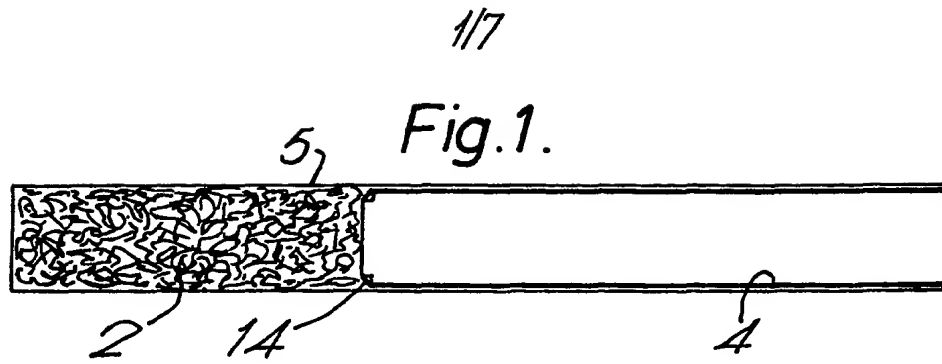


Fig.2.

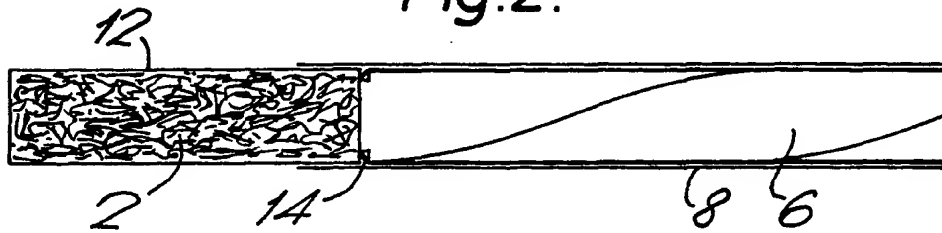


Fig.3.

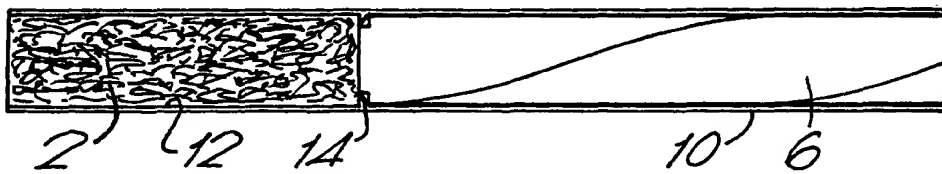


Fig.4.

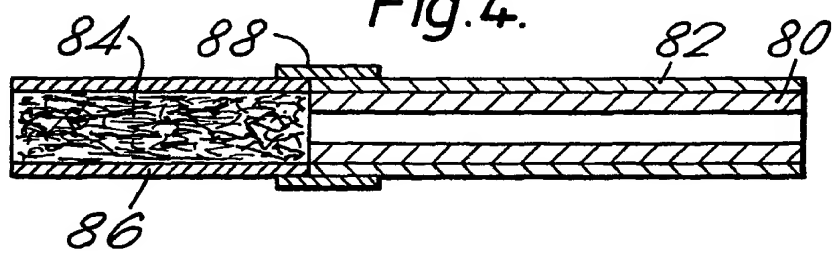
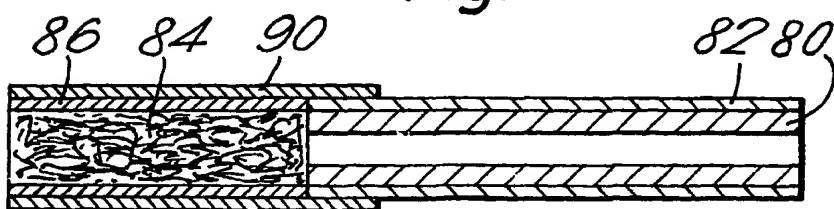
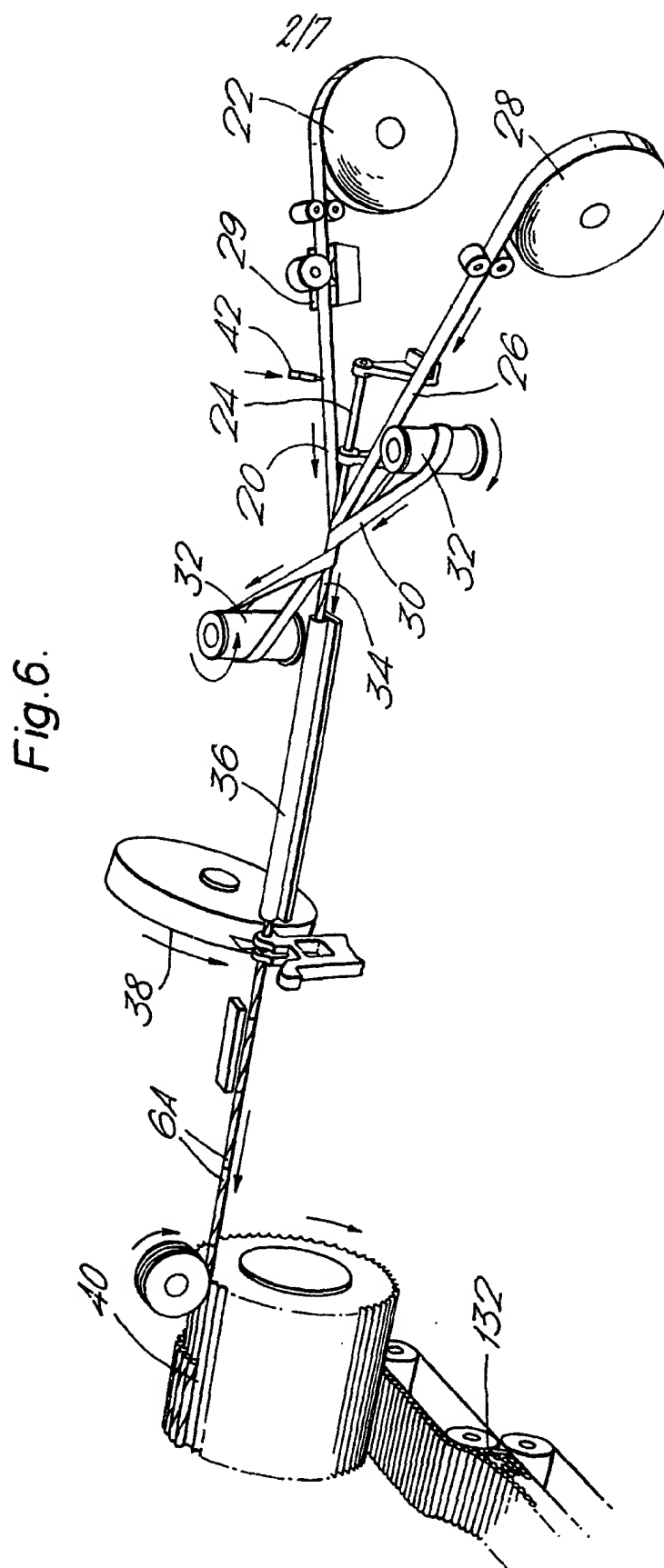
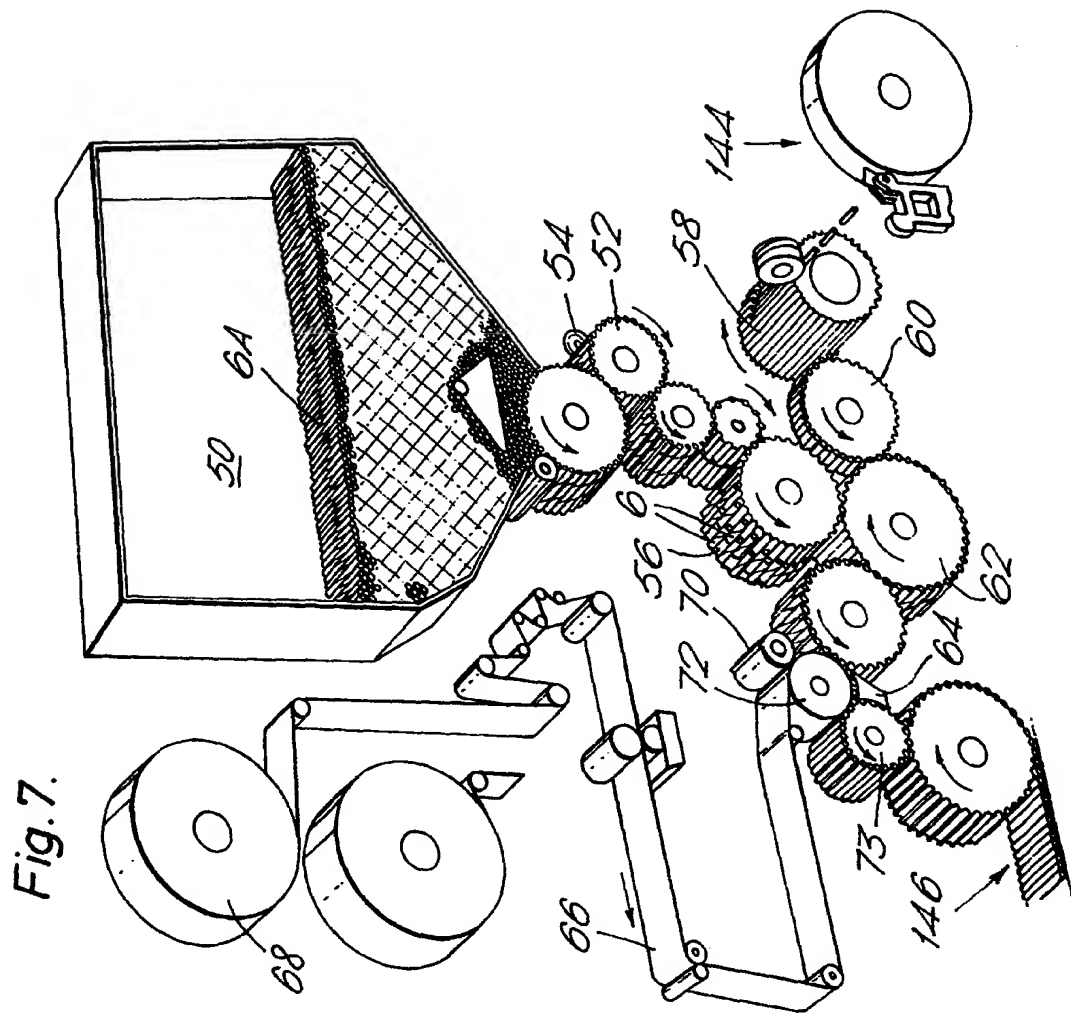


Fig.5.

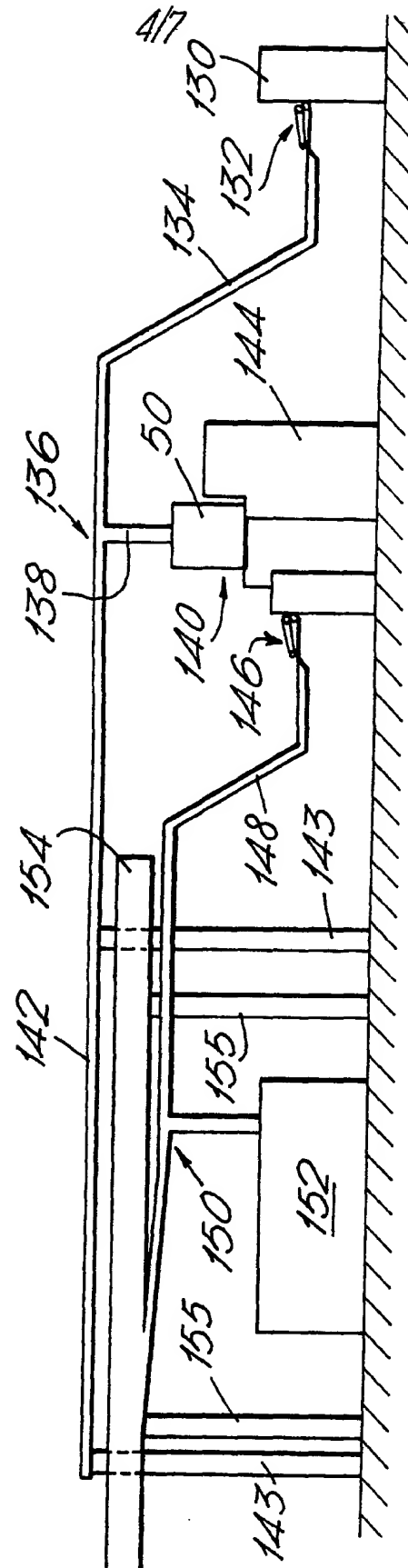


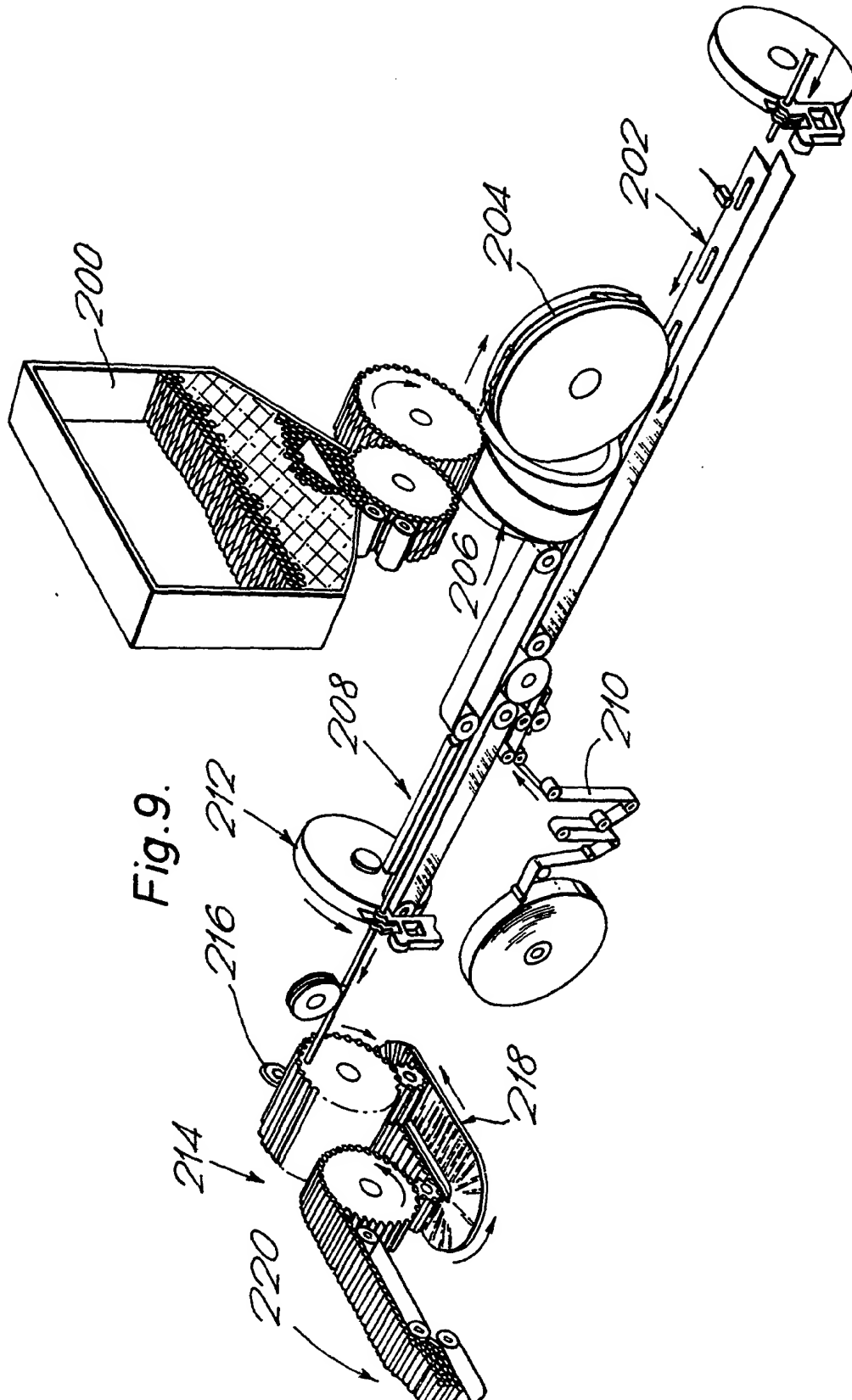




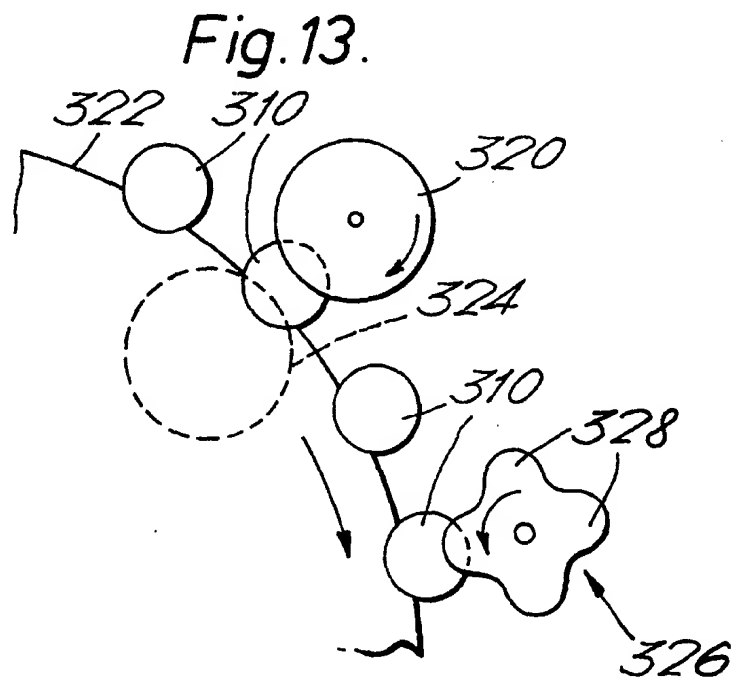
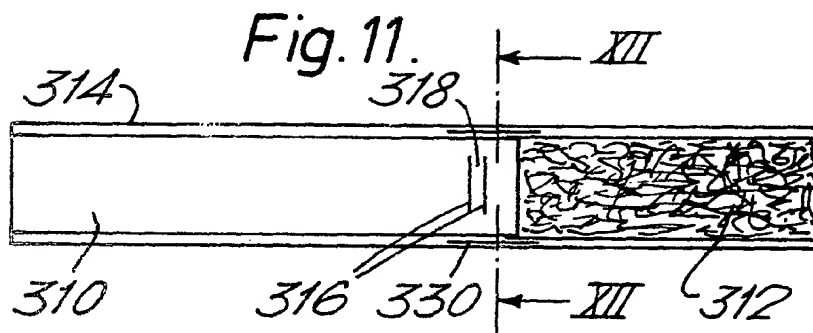
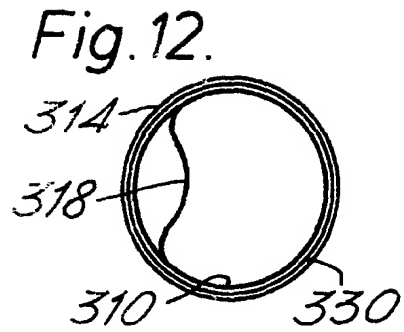
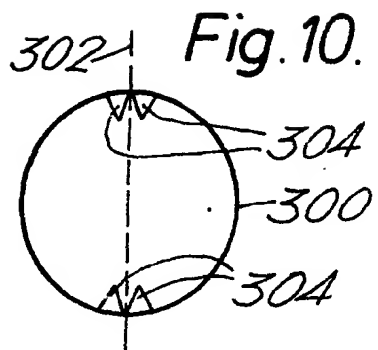
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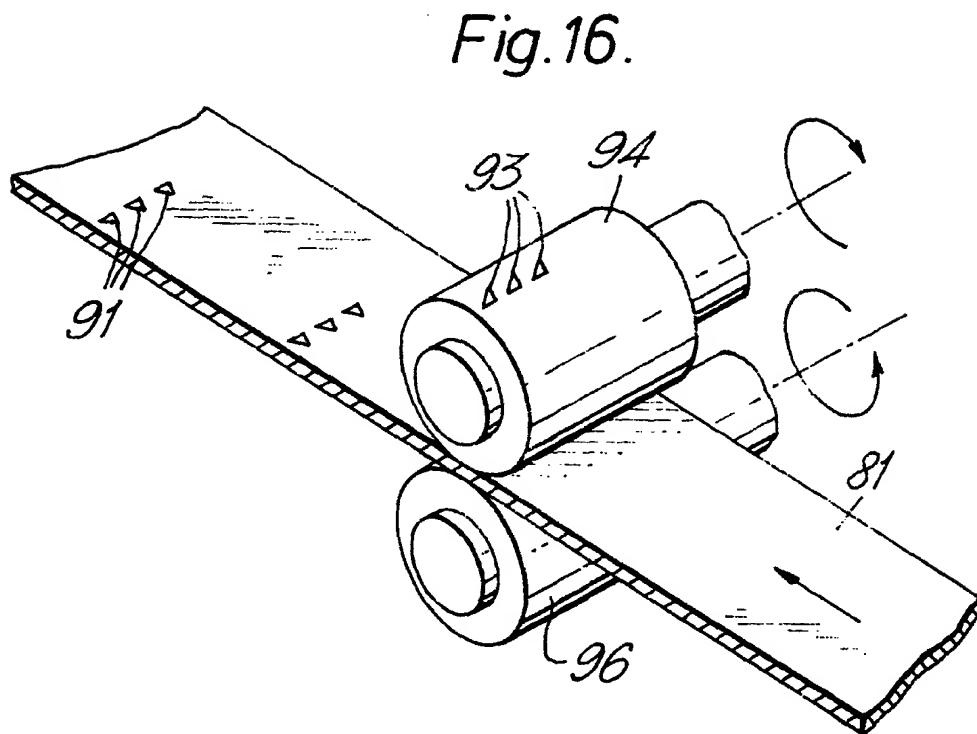
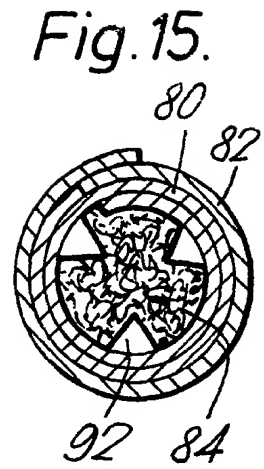
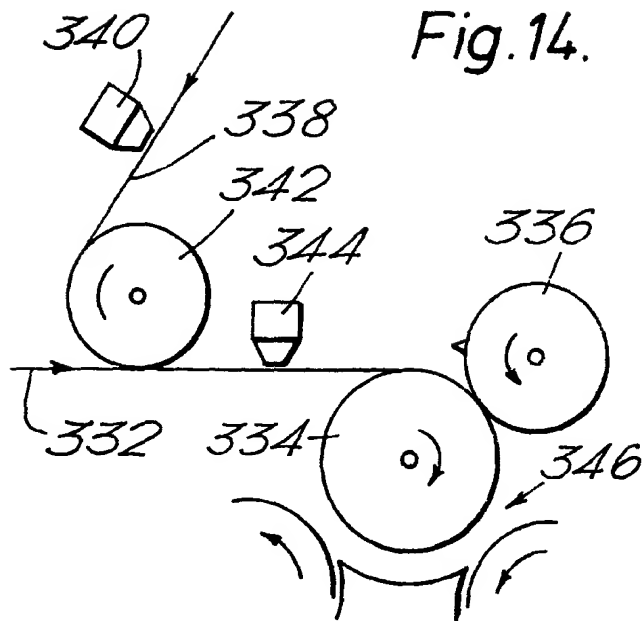
Fig. 8.





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SPECIFICATION

Cigarette manufacture

5 This invention relates to cigarette manufacture, and in particular to the manufacture of Russian or papirosi-style cigarettes.

10 These cigarettes (papirosi) generally include a tobacco portion and an abutting (or overlapping) tube of relatively stiff paper-like material. The tube and the tobacco portion are usually enclosed in a common wrapper of thin paper. A known method of manufacturing papirosi comprises forming a tube of paper wrapper, cutting it into lengths and inserting a tobacco 15 portion in one end of each tube and a preformed tube (e.g. of relatively stiff card) in the other end. This is a slow process and can be expensive in tobacco use.

It has also been suggested to manufacture papirosi by assembling tobacco sections and tubes using 20 assembly techniques which are used in the tobacco industry to assemble tobacco sections and filter portions. The present invention is concerned with papirosi-style cigarettes which may be manufactured at relatively high speed using these techniques.

25 According to one aspect of the invention a method of manufacturing cigarettes comprises feeding a first wrapper, forming a continuous rod by wrapping and sealing the wrapper around a tobacco filler stream, dividing the rod into sections, and uniting each section 30 with a mouthpiece portion by means of a second wrapper wherein the second wrapper extends over a substantial part of the length of the tobacco section. Preferably the first wrapper is porous and may be preformed during the feeding. The mouthpiece portion may comprise a tube, and the cigarette be of 35 papirosi type. If necessary, the resulting product is sub-divided to produce individual papirosi-style cigarettes. Thus the product of this method may comprise a papirosi-style cigarette having a tobacco 40 section with a perforated inner wrapper and an outer overwrapper. Preferably the outer wrapper is porous, and the inner and outer wrappers are of thin papirosi-style paper. The invention extends to the product of the method and to apparatus for performing the 45 method.

According to another aspect of the invention a tube for use in papirosi-style cigarettes comprises an inner helically-wound layer of paper or card-like material and an outer helically-wound layer of similar material 50 adhesively secured to the inner layer. In one preferred arrangement each layer is wound such that its edges are substantially in abutment, and in this arrangement preferably the abutting edges of the layers are offset. The material of the outer layer may be of higher 55 quality and/or improved appearance as compared with that of the inner layer.

Apparatus for forming the tube may comprise a mandrel around which the inner and outer layers are formed, and an endless driven friction belt helically 60 wrapped around the inner and outer layers for continuously advancing the layers onto and along the mandrel. The inner and outer layers are preferably fed from stationary reels, which may be replaced by means of automatic bobbin-changers.

65 According to another aspect of the invention

apparatus for manufacturing cigarettes comprises a tube making machine, and a 15 conveyor system for feeding tubes in multi-layer stack formation from the maker to an assembling machine, the conveyor 70 system including a junction and a reversible reservoir for tubes in multi-layer stack formation communicating with said junction. The reservoir may be substantially similar in operation to the cigarette reservoirs 20 manufactured by the applicants under the Trade

75 Marks OSCAR and MOLAR. In a preferred arrangement the assembling machine is linked to a packing machine by a conveyor system for cigarette assemblies in multi-layer stack formation, this further conveyor system including a junction and a reversible 80 reservoir (e.g. OSCAR) for the cigarette 25 assemblies.

The invention also extends to all novel cigarette constructions and methods of making such cigarettes described below.

The invention will be further described, by way of 85 example only, with particular reference to the accompanying diagrammatic drawings, in which:

Figures 1 to 5 show different types of papirosi-style cigarettes,

Figure 6 shows a tube-making arrangement,

90 Figure 7 shows an arrangement for assembling cigarettes,

Figure 8 shows a conveyor arrangement for handling tubes 5 and cigarettes,

95 Figure 9 shows an alternative arrangement for assembling cigarettes,

Figure 10 is an end view of a tube for a papirosi-style cigarette,

Figure 11 shows another type of papirosi-style cigarette,

100 Figure 12 is a sectional view on the line XII-XII in Figure 11, and

Figures 13 and 14 show different parts of an apparatus for manufacturing the cigarette of Figure 11,

105 Figure 15 is a transverse sectional view of a cigarette similar to that of Figure 5, and

Figure 16 shows part of an apparatus for manufacturing the cigarette of Figure 15.

Figure 1 shows a conventional papirosi-style 110 cigarette having a relatively short tobacco section 2 and a hollow tube 4. The tube 4 is conventionally formed of a spiral roll comprising at least two complete revolutions of a sheet of stiff paper. An outer wrapper 5 surrounds the tube 4 and tobacco section 2. 115 The tobacco forming the section 2 is normally pushed into the open end of the wrapper 5 after the wrapper has been wrapped around the tube 4.

Figure 2 shows an alternative style comprising an helically wound tube 6 joined to the tobacco section 2 120 by an overwrapper 8 which overlaps partly onto the tobacco section. In this case the tobacco section 2 is prewrapped with its own wrapper 12.

Figure 3 shows a further cigarette style in which the tobacco section 2 and tube 6 are united by a wrapper 125 10 which extends fully over the tobacco section. The tobacco section 2 is covered in a first wrapper 12, in which the tobacco section 2 is formed, and a second wrapper comprising the overwrapper 10. Both the wrapper 10 and the wrapper 12 preferably consist of 130 the thin paper conventionally used for papirosi-style

cigarettes. Although this paper has some porosity, additional ventilation for the cigarette shown in Figure 3 is preferably provided by perforating the wrapper 12. Since the wrapper 12 is eventually to be covered by the wrapper 10 the appearance of the perforations in the wrapper 12 is of relatively little importance.

The tube 6, in common with the tube 4, includes inwardly directed flaps 14 at its end adjacent the tobacco section 2, which serve to prevent tobacco being drawn down the hollow tube when the cigarette is smoked.

Figure 4 shows another style of cigarette. The tobacco section 84 is covered with a wrapper 86, and may be substantially the same as the tobacco section 2 and wrapper 12. The cigarette further includes a tube 80 having its own wrapper 82. The tube 80 and tobacco section 84 are joined by a relatively narrow uniting band 88. The wrappers 82 and 84 may be of similar papirosi-type paper.

The cigarette of Figure 5 is similar to that of Figure 4 in having a tobacco section 84 with wrapper 86 and tube 80 with wrapper 82.

The tobacco section 84 and tube 80 are united by a further wrapper 90, which spans the whole length of the tobacco section 84 and overlaps onto the tube 80.

Figure 6 shows an arrangement for making the tube 6. A first or inner layer of relatively stiff paper 20 delivered from a reel 22 is wrapped helically around a heated mandrel 24. A second or outer layer 26 of similar paper from a reel 28 is helically wrapped around the inner layer on the mandrel 24. Adhesive is applied by an applicator 29 to the surface of the layer 20 which will be covered by the layer 26. The wrapping process is performed by a friction belt 30 passing around capstans 32 and having an upper driving run helically wrapped around the layers 20 and 26 and the mandrel 24, and a straight return run passing beneath the mandrel 24. This wrapping process is substantially similar in principal to that shown in US patent specification No. 1006976. Downstream of the belt 30 the layers 20 and 26 form a tube 34, the diameter of which is determined by the mandrel 24, which passes through a heater 36 for setting the adhesive. Subsequently the tube 34 is divided into double length tubes 6A by a continuous rod cut-off 38. The tubes 6 are subsequently delivered to a catcher drum 40 in a conventional manner and are passed to a stack former 132.

A punch 42 is arranged just downstream of the adhesive applicator 28, for partially separating the sections which will form the flaps 14 in the tubes 6. Operation of the punch 42 is synchronised with the cut-off 38. Alternatively, an arrangement similar to that shown in Figure 16 could be used.

The mandrel 24 could be chilled if hot melt adhesive were applied by the applicator 29 (or if such an adhesive were carried by one of the layers 20, 26). Similarly, the heater 36 could comprise a cooler. Instead of the layer 20 carrying the adhesive, the layer 26 could alternatively (or additionally) carry adhesive on its inner surface.

Each of the layers 20 and 26 is helically wound with adjacent edges in abutment, but with the abutting edges of the outer layer offset from those of the inner layer.

The reels 22 and 28 are automatically changed by a bobbin changer similar to those used on conventional cigarette makers.

The tobacco section 2, forming part of a cigarette similar to that shown in Figure 2 or Figure 3 is manufactured in a modified Molins Mk 8 cigarette making machine. The wrapper 12 is thin papirosi-type paper and an on-line paper perforator of the type disclosed in British patent specification No. 2055669A may be incorporated for perforating the wrapper to improve ventilation. The tobacco section 84 and wrapper 86 of the cigarettes of Figures 4 and 5 may be made in the same way.

The assembly of cigarettes similar to those shown in Figure 3 is shown in Figure 7. Double length tubes 6A are delivered to a hopper 50 from which they are delivered by a series of fluted drums, including a drum 52 on which they are divided into individual tubes 6 by a rotary knife 54. Subsequently, the tubes 6 are shifted into a single transversely-moving row on a drum 56.

Individual tobacco lengths 2 delivered from a rod maker 144 are received on a catcher drum 58 and subsequently delivered by way of an intermediate drum 60, to an assembly drum 62 on which they are assembled in alignment with tubes 6 delivered from the drum 56.

The individual tobacco sections 2 and tubes 6 are united by a conventional rolling method including a rolling plate 64, as used in Molins PA8 machines. A web of material 66, for forming the wrapper 8, is delivered from a reel 68 and is cut into individual portions by a rotary knife 70 cooperating with a suction rolling drum 72. After the assemblies have been united they are passed to a stacking device 146.

In order to manufacture the cigarette of Figure 2, rather than that of Figure 3, the web 66 would be replaced with a web having a width appropriate to that of the wrapper 8. The width and/or placement of the web forming the wrapper 8 or 10 is such that preferably it does not extend beyond the end of the tube 6; that of the wrapper 10 might be such that it extends slightly beyond the end of the tobacco section.

In the Figure 7 arrangement individual tobacco lengths 2 are united to individual tubes 6. In conventional cigarette manufacture it is common to unite single length tobacco sections to each end of a double length filter portion and subsequently to divide the product into individual filter cigarettes. It would be possible to manufacture the cigarettes of Figure 2 or 3 in a similar manner. Alternatively, double length assemblies may be manufactured by uniting individual tubes to each end of a double length tobacco section, using a wrapper which overlaps the adjacent end portions only of the tubes. In this case, since most of each tube 6 would not be covered by a wrapper, the outer layer 26 of the tube should be of acceptable appearance. The outer layer 26 could be manufactured of higher quality material than the inner layer 20.

The cigarette of Figure 5 is preferably manufactured by a method in which individual tubes 80 are joined to each end of a double length tobacco section (ie. two sections 84). One form of apparatus for performing this method is similar to that shown in Figure 7 with

the following differences. The hopper 50 can contain double length tubes 80. The individual tubes 80 remain in alignment following transfer from the drum 52 and are ploughed apart on the drum 56 so that individual tobacco sections 86 received from the rod maker 144 may be placed between each pair of aligned tubes 80 on the drum 62. The wrapper 66 is of appropriate width corresponding to a double length wrapper 90, so that a double assembly is formed downstream of the rolling plate 64. This double assembly is divided into individual cigarettes by a knife (similar to knife 54) cutting each assembly at its mid-point on the drum 73 following the rolling plate 64. Subsequently the two streams of cigarettes thus formed may be formed into stacks and combined following a tip turning operation (e.g. as shown at 218 in figure 9 or as disclosed in British patent specification No. 2079132).

As an alternative to the rolling method of assembly shown by Figure 7, an in-line process for assembling the cigarettes of Figures 2, 3 or 5 could be adopted. An appropriate arrangement for an in-line method of manufacture is disclosed in British patent specification No. 1526402, to which reference is directed for further details.

Reference is also directed to British patent specification No. 1531424 for details of an alternative method of uniting tobacco sections and tubes in the production of papirosi-style cigarettes. This method is capable of producing the cigarette of Figure 4.

Figure 8 shows a complete conveyor system for use in the manufacture of papirosi-style cigarettes. The system includes a tube making machine 130, which may be substantially as shown in Figure 6, or which may comprise a substantially conventional continuous rod making machine supplied with material to form the tube 80 in wrapper 82. The stack former 132 delivers a multi-layer stream of tubes to an inclined elevator 134 and a junction 136 from which extends downwardly a chute 138 leading to the hopper 50 of an assembling machine 140, which may be substantially as shown in Figure 7 (possibly as modified to make the cigarette of Figure 5). A reversible reservoir 142 for tubes is also connected to the junction 136, to supplement or to absorb the flow from the elevator 134, as required.

A stack former 146 of the assembling machine 140 supplies a mass flow stream of cigarettes to an elevator 148 for delivery, via a junction 150 to a packing machine 152. Also connected to the junction 150 is a multi-tiered reversible reservoir 154, of the type manufactured by the applicants under the Trade Mark OSCAR. It may be noted that the reservoir 142 for tubes comprises a straight reservoir supported above the reservoir 154 on pillars 143, the reservoir 154 being supported on pillars 155.

Preferably the system includes means for monitoring the state of fill of the reservoir 142 and varying the speed of the tube maker 130 in accordance with signals from the monitoring means. For example, if the tube maker 130 is capable of high, normal and low speeds, the reservoir 142 could incorporate positionally adjustable sensors to initiate high speed when the reservoir is nearly empty and low speed when the reservoir is nearly full. If the reservoir 142 becomes

empty the maker 144 will be stopped, and if the reservoir 142 becomes full the tube maker 130 will be stopped.

It should additionally be noted that the system should preferably be arranged such that the tubes of the cigarette assemblies are outermost on the curves of the reservoir 154.

Figure 9 shows another arrangement for assembling tubes and tobacco sections. Tubes are delivered from a hopper 200 onto a rod-line 202 by a feed wheel 204. Tobacco sections and tubes are conveyed forward in abutment and timed by a timing device 206 and delivered to a rod-forming unit 208 in which a continuous composite rod is formed by wrapping the tobacco sections and tubes in a continuous wrapper 210. Subsequently, double length assemblies are cut from the rod by a continuous rod cut-off 212 and delivered to a catcher unit 214 at which the assemblies are sub-divided into individual cigarettes by a rotary knife 216. The unit 214 incorporates a tip turner 218 and a stack former 220.

Instead of feeding a continuous wrapper 210 separate spaced wrapper sections may be fed to the unit 208, so that selected junctions between the tobacco sections and tubes are spanned and united. Thus separate assemblies may be formed in the unit 208 and no cut-off 212 is required. For details of this and of other features applicable to the system of Figure 9 reference is directed to British patent specification No. 2126466.

The tube 6, forming part of the cigarette of Figure 2 or Figure 3, may be constructed of an inner layer of relatively stiff or thick material in which perforations are formed and an outer layer of relatively thin material which is preferably at least partially porous. Thus the inner layer may be of card formed with holes as it is fed as a web (by provision of perforating means between the reel 22 35 and the mandrel 24, for example). The outer layer could comprise conventional papirosi-style paper. As compared with an arrangement in which the wrapper for the tobacco section 2 is perforated and subsequently covered with a wrapper 10, the arrangement wherein it is the tube inner layer which is perforated can provide increased ventilation. If necessary, adhesive applied to unite the inner and outer layers of the tube could be applied in such pattern in relation to a pattern of perforations made or to be made in the inner layer that the perforations and adhesive do not coincide.

Instead of perforating the inner layer of material of the tube 6 it may be possible to provide for the adjacent edges of each turn of the inner layer to be slightly spaced, i.e. so that the edges are not quite in abutment. In this case, however, the strength of the resulting tube may be impaired, especially where the outer layer is of relatively thin material.

The outer layer of material of the tube may be porous and/or preperforated, or may be perforated between the reel 28 and the mandrel 24.

The widths of the inner and outer layers of the tube need not be the same. In particular, the outer layer could be relatively narrow and overlap only the region of the inner layer adjacent its edges (which may be in abutment or slightly spaced). In such case a further outer wrapper having a longitudinally seam could be

applied around the resulting tube, preferably by wrapping and sealing the tube in a wrapper web in a conventional or similar garniture. In general a tube having one or more helically wound layers may

5 include an outer wrapper having a longitudinal seam. Although construction of the tube has been described particularly with reference to inner and outer layers and two layers are currently preferred, three or more helically wound layers may be provided in

10 principle.

One problem with the arrangement of Figure 6 is that it may not be possible to ensure that the flaps 14 are fully effective, in view of the tendency for the cut-outs provided by the punch 42 to be flattened by

15 the wrapping process around the mandrel 24. It may therefore be necessary to provide indents or other obstructions, in order to prevent the fireball being drawn into the tube when the cigarette is smoked, by means other than the punch 42.

20 For example, as shown in Figure 10, each tube 300 may, after manufacture, be moved past a rotary knife (not shown) which slits the tube diametrically to a depth of a few millimetres along the line 302. The

25 resulting flaps 304 could then be bent inwardly to form an obstruction in the tube.

Other possibilities for preventing passage of burning tobacco down the tubes are the incorporation of a filter or other obstruction which may be introduced into the tube after manufacture and before assembly

30 with the tobacco section, or adhesively securing the tobacco in that end of the tobacco section which will lie adjacent the tube after assembly. Possibly during manufacture of the tobacco section 10 excess adhesive may be used to secure the seam of the wrapper,

35 so that the excess helps secure tobacco to itself and to the wrapper.

Figure 11 shows a further papirosi-style cigarette having a tube 310 connected to a tobacco section 312 by an outer wrapper 314. The tube 310 has a pair of

40 transverse slits 316 in its end adjacent the tobacco section 312 and the portion 318 of the tube between the slits is displaced inwardly to form an obstruction in the tube, as shown in Figure 12.

As shown in Figure 13 the slits 316 in the tube 310

45 are formed by a pair of closely spaced rotary knives 320 which partially cut the tubes as they are conveyed on a fluted drum 322. The drum 322 could, for example, comprise a drum following the drum 52 in the arrangement of Figure 7. More than one pair of slits

50 could be made in each tube 310. For example, if the tube 310 extended longitudinally slightly beyond the end of the drum 322 an additional pair of knives could be provided to form slits in the tubes 310 diametrically

55 opposite the slits 316. A possible position for the additional knives is indicated at 324 in Figure 13.

Alternatively, knives cutting from the outside could be situated at the preceding or following drum.

Downstream of the knives 320 a rotary element 326

60 having lobes 328 is provided to displace the portions 318 into the form shown in Figure 12. The length of the slits 316, and hence of the portions 318, are such that following displacement by the lobes 328 the portions

318 remains in the position shown in Figure 12.

instead of making a pair of slits 316 at some

65 distance from the end of each tube 310 a single slit

could be made relatively close to the end and the portion of the tube between the slit and its end could be displaced by an element similar to the elements 326.

70 The portions 318 (or equivalent portions) serve to form an obstruction in the tube 310 to prevent burning tobacco being drawn down the tube when the cigarette is smoked.

The gap formed in the outer periphery of the tube

75 310 by the displacement of the portion 318 may be visible if the wrapper 314 is of relatively thin material. The gap may be masked by an additional ring of material 330 which may also extend over the junction

between the tube 310 and the tobacco section 312 and

80 additionally serve to strengthen the bond between them. Figure 14 shows an arrangement whereby a web 332 for forming the wrapper 314 is fed to drum

334 and 10 rotary knife 336 at a rolling plate assembly

346 located in an equivalent position to that associated

85 with the knife 70 and drum 72 in the arrangement of Figure 7. A narrow web 338 for forming the wrapper

330 is provided with an adhesive by an applicator 330 and fed onto the web 332 by a roller 342. Subsequently

90 the web 332, carrying 15 the adhesively secured narrow web 338, passes to the drum 334 and knife 336

after being supplied with the adhesive for uniting to the tube 310 and tobacco section 312 by an applicator

344.

The wrapper 314 might be printed so that the print

95 overlies (and, therefore, at least partially masks) the slotted gap formed by displacement of the portion 318. Possibly the printing could be timed on the web

332 so as to coincide with that portion of the web which will overlie the gap. Alternatively the web 332

100 could have a continuous line of repeated printing so that a ring of printed matter in the appropriate axial position will be located over the gap. In this case the

printing could be spaced so that normally an integral number of repeated messages (e.g. names) surrounds

105 the tube 310: the timing would be less critical than in the case where a single message has to cover the gap. Where printing is arranged to cover the gap the

additional narrow uniting band 330 (and web 338) may be unnecessary.

110 It may be noted that where a tube 310 is provided with a cut-out portion or portions similar to the flaps 304 in Figure 10 or portion 318 in Figure 11 this will

provide ventilation for the cigarettes when the outer wrapper has some porosity. In the cigarette of Figure 11

115 for example, the narrow uniting wrapper 330 may be dispensed with and the wrapper 314 may be of relatively porous material so that the cigarette is

ventilated through the gap between the slits 316. The outer wrapper 314 need not extend over the whole

120 length of the tobacco section 312.

The tube 80 of Figures 4 and 5 need not be helically wound and may comprise more than one thickness of

material. For example the tube 80 may have the form

125 shown in British patent specification No. 1179312 and be manufactured as disclosed in British patent specification No. 1214491 or 1352331. Alternatively, as

shown in Figure 15, the tube 80 may have the form of a spiral roll of card or similar material contained in an

outer wrapper 82. The tube 80 may be wrapped and

130 sealed in the wrapper 82 in the garniture of a

continuous rod making machine.

As shown in Figure 15 the tube 80 has triangular cut-outs 92 for forming a fireball trap. Referring also to Figure 16, the cut-outs 92 may be formed by passing a web 81, from which the tube is formed, between a pair of driven rollers 94, 96. The roller 94 has appropriately shaped knives 93 for cutting and displacing triangular portions or flaps 91 from the web 81. The roller 96 has suitably - located depressions to co-operate with the knives 93. The web 81 is subsequently slit (eg. as in British patent specification No. 1214491) or rolled to form a continuous spiral roll, before being wrapped in the wrapper 82.

CLAIMS

1. A method of manufacturing cigarettes comprising feeding a first wrapper, forming a continuous rod by wrapping and sealing the wrapper around a tobacco filler stream, dividing the rod into sections, and uniting each section with a mouthpiece portion by means of a second wrapper, characterised in that the second wrapper extends over a substantial part of the length of the tobacco section.

2. A method as claimed in claim 1, wherein the first wrapper is porous.

3. A method as claimed in claim 2, including the step of perforating the first wrapper during feeding.

4. A method as claimed in any of claims 1 to 3, wherein at least one of the first and second wrappers comprises papirosi-style paper.

5. A method as claimed in any preceding claim, wherein the second wrapper extends over a substantial part of the length of the mouthpiece portion.

6. A method as claimed in any preceding claim, wherein the tobacco section and mouthpiece portion are united by a rolling process.

7. A method as claimed in claim 6, wherein double length assemblies each comprising an axially inner double length tobacco section and axially outer single length mouthpiece portions are formed.

8. A method as claimed in any preceding claim, wherein each mouthpiece comprises a tube formed by a continuous rod-making process.

9. A method as claimed in claim 8, wherein the tube is formed on a mandrel extending to the garniture of a rod making unit.

10. A method as claimed in claim 8 or claim 9, wherein the tube is formed by helical winding of at least two layers.

11. A method as claimed in any of claims 8-10, wherein the tube includes an outer wrapper of relatively thin material.

12. A method as claimed in any of claims 8-11, wherein at least one portion of the material forming an inner layer of the tube is displaced inwardly to act as a fireball trap.

13. Apparatus for performing the method of any of claims 1-12 comprising means for feeding a first wrapper, means for forming a continuous rod, means for dividing the rod into sections, and means for uniting each section with a mouthpiece portion by means of a second wrapper, characterised in that the means for feeding the second wrapper is arranged so that the second wrapper extends over a substantial part of the length of the tobacco section.

14. A cigarette manufactured by the method of any

of claims 1-12.

15. A cigarette including a mouthpiece tube, the tube comprising an inner helically-wound layer of paper or card-like material and an outer helically-wound layer of similar material adhesively secured to the inner layer.

16. A cigarette as claimed in claim 15, wherein each layer is wound such that its edges are substantially in abutment.

17. A cigarette as claimed in claim 16, wherein the abutting edges of the inner and outer layers are offset.

18. Apparatus for making mouthpiece cigarettes comprising a tube-making machine, a conveyor system for feeding tubes in multi-layer stack formation from the making machine to an assembling machine, and means for delivering tobacco sections to the assembling machine, wherein the conveyor system includes a junction and a reversible reservoir for tubes in multi-layer stack formation communicating with said junction.

19. A method of manufacturing cigarettes, substantially as herein described with particular reference to any of Figures 2-16.

20. Apparatus for making mouthpiece cigarettes, substantially as herein described with particular reference to any of Figures 2-16.

21. A mouthpiece cigarette, substantially as herein described with particular reference to any of Figures 2-5, Figure 10, Figures 11 and 12, or Figure 15.

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